

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

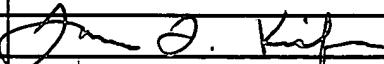
TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

81

| | |
|------------------------|---------------------|
| Application Number | 10/702,364 |
| Filing Date | November 6, 2003 |
| First Named Inventor | Neil Hoffman et al. |
| Art Unit | 1616 |
| Examiner Name | Not Yet Assigned |
| Attorney Docket Number | 2054US |

| ENCLOSURES (Check all that apply) | | |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Remarks 1) PTO-1449 and eleven reference. | | |
| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | |
| Firm or Individual name | Laura L. Kiefer, Registration No.: 48,154 | |
| Signature |  | |
| Date | March 5, 2004 | |

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

| | | |
|-----------------------|---|------|
| Typed or printed name | Laura A. Huntington | |
| Signature |  | Date |
| | March 5, 2004 | |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Attorney Docket No.:2054US
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Neil Hoffman et al.

APPLICATION NO: 10/702,364

FILED: November 6, 2003

FOR: *Methods for the Identification of Inhibitors Of Biotin Synthase Expression or Activity in Plants*

Commissioner for Patents
Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT

Dear Sir,

In accordance with 37 CFR §1.56, Applicants submit the references cited on the attached Form PTO-1449. Copies of the references are enclosed herewith. It is not believed that additional fees are owed at this time. However, in the case that fees are due, the Commissioner is hereby authorized to charge any additional fees required, or to credit any overpayment, to Deposit Account No. 50-0885.

Respectfully submitted,



Laura L. Kiefer
Agent for Applicant

Patent Department
Paradigm Genetics, Inc.
108 Alexander Drive
Research Triangle Park, NC 27709
(919) 425 – 3000
Date: March 4, 2004

Reg. No. 48,154

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, Alexandria, VA 22313

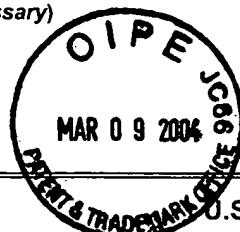
Laura A. Huntington
Type or print name


Signature

March 5, 2004
Date

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)



ATTY. DOCKET NO.
2054US
APPLICATION NO.
10/702,364
APPLICANT
Neil Hoffman et al.
FILING DATE
November 6, 2003

Group 1616

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE |
|------------------|----|-----------------|------|------|-------|----------|-------------|
| | AA | | | | | | |
| | AB | | | | | | |
| | AC | | | | | | |
| | AD | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | OFFICE | CLASS | SUBCLASS | TRANSLATION YES <input type="checkbox"/> NO <input type="checkbox"/> |
|--|----|-----------------|------|--------|-------|----------|---|
| | AE | | | | | | <input type="checkbox"/> <input type="checkbox"/> |
| | AF | | | | | | <input type="checkbox"/> <input type="checkbox"/> |
| | AG | | | | | | <input type="checkbox"/> <input type="checkbox"/> |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

| | | |
|---|----|--|
| ✓ | AH | Patton, David A.; Schetter, Amy L. et al. "An Embryo-Defective Mutant of Arabidopsis Disrupted in the Final Step of Biotin Synthesis", Vol. 116, <i>Plant Physiol.</i> , pp. 935 - 946, 1998. |
| ✓ | AI | Patton, David A.; Johnson, Marie, et al. "Biotin Synthase from <i>Arabidopsis thaliana</i> ", Vol. 112, <i>Plant Physiol.</i> , pp. 371 - 378, 1996. |
| ✓ | AJ | Baldet, Pierre; Alban, Claude et al. "Biotin synthesis in higher plants: purification and characterization of bioB gene product equivalent from <i>Arabidopsis thaliana</i> overexpressed in <i>Escherichia coli</i> and its subcellular localization in pea leaf cells", Vol. 419, <i>FEBS Letters</i> , pp. 206-210, 1997. |
| ✓ | AK | Bui, Bernadette Tse Sum; Florentin, Dominique, et al. "Biotin synthase mechanism: on the origin of sulphur", Vol. 440, <i>FEBS Letters</i> , pp. 226-230, 1998. |
| ✓ | AL | Birch, Olwen M., Hewitson, Kirsty S. et al., "MioC Is an FMN-binding Protein That Is Essential for <i>Escherichia coli</i> Biotin Synthase Activity <i>in Vitro</i> ", Vol. 275(41), <i>The Journal of Biological Chemistry</i> , pp. 32277-32280, October 13, 2000. |
| ✓ | AM | Choudens, Sandrine Ollagnier-de; Fontecave, Marc, "The lipoate syntase from <i>Escherichia coli</i> is an iron-sulfur protein", Vol. 453, <i>FEBS Letters</i> , pp. 25-28, 1999. |
| ✓ | AN | Weaver, Lisa M.; Yu, Fei et al., "Characterization of the cDNA and Gene Coding for the Biotin Synthase of <i>Arabidopsis thaliana</i> "; Vol. 110; <i>Plant Physiol.</i> , pp. 1021-1028, 1996. |
| ✓ | AO | Baldet, Pierre; Ruffet, Marie-Line, "Biotin Synthesis in Higher Plants: Isolation of a cDNA encoding <i>Arabidopsis thaliana</i> bioB-gene product equivalent by functional complementation of a biotin auxotroph mutant bioB105 of <i>Escherichia coli</i> K12, Vol. 319, <i>C.R. Acad. Sci.</i> , pp. 99 – 106, (1996). |
| ✓ | AP | Grima-Pettenati, J.; Feuillet C. et al., "Molecular Cloning and Expression of a <i>Eucalyptus gunnii</i> cDNA clone encoding cinnamyl alcohol dehydrogenase", Vol. 21, <i>Plant Molecular Biology</i> , pp. 1085-1095, 1993. |

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)



ATTY. DOCKET NO.
2054US
APPLICATION NO.
10/702,364
APPLICANT
Neil Hoffman et al.
FILING DATE
November 6, 2003

Group 1616

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE |
|------------------|----|-----------------|------|------|-------|----------|-------------|
| | AA | | | | | | |
| | AB | | | | | | |
| | AC | | | | | | |
| | AD | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | OFFICE | CLASS | SUBCLASS | TRANSLATION YES <input type="checkbox"/> NO <input type="checkbox"/> |
|--|----|-----------------|------|--------|-------|----------|---|
| | AE | | | | | | <input type="checkbox"/> <input type="checkbox"/> |
| | AF | | | | | | <input type="checkbox"/> <input type="checkbox"/> |
| | AG | | | | | | <input type="checkbox"/> <input type="checkbox"/> |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

| | | |
|---|----|--|
| ✓ | AH | Azoulay, M.; Desbene, P. L., et al., "Use of liquid chromatography-mass spectrometry for the quantitation of dethiobiotin and biotin in biological samples", Vol. 303, <i>Journal of Chromatography</i> , pp. 272 – 276, (1984). |
| ✓ | AI | Baldet, Pierre; Heidrun, Gerbling et al., "Biotin Biosynthesis in higher plant cells – Identification of intermediates, Vol. 217, <i>Eur. J. Biochem</i> , pp. 479- 485, (1993). |
| | AJ | |
| | AK | |
| | AL | |
| | AM | |
| | AN | |
| | AO | |
| | AP | |

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.